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Fee Attached Amendment/Reply After Final Affidavits/declaration(s) Extension of Time Request Express Abandonment Request	Drawing(s) Licensing-related Papers Petition Petition to Convert to a Provisional Application Power of Attorney, Revocation Change of Correspondence o	Address	Appeal of Appeal (Appeal Proprie	Enclosure(s) (please Identify :	
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June 27, 2005

Ellen Huffman

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Timothy David Robert Henderson

Application No.: 10/708,471

Filed: 03/05/2004

Title: RESILIENT ELASTOMERIC STRUCTURE

Art Unit: 3714

Examiner: Kien T. Nguyen

Attorney Docket No.: 800769

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RESPONSE UNDER 37 CFR 1.111

Introductory Comments

Dear Sir:

The Applicant thanks the Office for the consideration given the application in the communication of April 26, 2005. Applicant has submitted new Figure 12, which illustrates the elastomeric ride body of Figure 1 covered with a defensive cover of chain mail as set forth in claim 11, to overcome the Office objection under 37 CFR 1.83(a). The specification has also been amended to include numeric reference to the defensive cover shown in Figure 12.

Applicant has amended independent claim 1 by incorporating the limitations of dependent claims 4, 5, 6, 7 and 8 into claim 1, and canceled claims 4, 5, 6, 7 and 8. Claims 9, 10 and 25 have been amended to reflect the amendments made to claim 1 and to correct a typographical error. Claim

26 has also been canceled. These amendments are supported by the specification as filed, and no new matter has been added by these amendments.

Applicant submits that the claims, as amended, define over the references cited in the Office Action of April 26, 2005. Contrary to the Office's assertion of obviousness, all elements of Applicant's claims are not disclosed in the cited references of Steingraber et al in view of Nicolai. Although the purpose of Applicant's invention and the invention described in the Steingraber reference is to provide an elastomeric support structure for playground equipment, the mechanisms for producing that result are patentably distinguishable.

It is essential for long life and for safety of playground equipment that the elastomeric material used in ride support structures is loaded essentially in compression at the interconnection regions with the ride and the mounting base. Hence, the provision of a flange 30 in the elastomeric body of Applicant's invention that is clamped between an annular metal ring 42 and the mounting base 46, and between another annular metal ring 42 and the ride body 10. Material fatigue is a real problem in this type of application where there is a large amount of cyclic strain within the elastomer. Stress risers occur wherever there is an interface between metal and elastomeric components, and it is there that failure is most likely to occur. Fatigue is a highly undesirable failure mode since it tends to happen catastrophically.

It is inevitable that the Steingraber device will fatigue in an area surrounding the washers that are located below the nuts 24 and at the interface between the upper mounting member 36 and the elastomer dome 35, and the lower mounting member 25 and the elastomer dome 35.

There is no clamping action at the concave wall 37 of the mounting member 36 and the elastomer dome 35, nor is there any clamping action between the flat metal plate mounting member 25 and the elastomer dome 35. These interfaces appear to rely on adhesion between the

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mounting members 25, 36 and the elastomer dome for structural integrity. Therefore, it is inevitable over time that the grip of the elastomer material on the mounting members 25, 36 will eventually lessen, causing failure such that the supporting shaft 14 will part from the elastomer dome 35.

There is no elastomer held in compression for support in the Steingraber disclosure as is claimed in Applicant's disclosure. A careful reading of the Steingraber disclosure and close inspection of Figure 3 of Steingraber shows that the metal mounting member 25 lies below the flanged portion of the elastomer dome 35 of the spring device 10. Thus, the metal mounting member 25 does not compress the elastomer material of the dome 35. Likewise, there is no compressive clamping action in the region of the mounting member 36.

In addition, the assertion by the Office is not correct that the support post 14 described in the Steingraber reference is part of the ride body 12. It is clear from the description in column 2, lines 28-38 and in Figure 1 of the Steingraber reference that the essential elements of this invention include the ride body or seat unit 12, the support post 14, and the spring device 10. The essential elements of Applicant's invention are a ride body 10 and a support structure 12. Compare Applicant's Figure 1 with Steingraber's Figure 1, and Applicant's Figure 2 with Steingraber's Figure 2. The combination of the Steingraber's seat unit 12, support post 14 and Applicant's support structure 12 would not equal Applicant's claimed invention, as suggested by the Office. Since Applicant's does not require the essential element of a support post as required by the Steingraber reference, Applicant's invention provides a patentable improvement over the Steingraber invention.

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Therefore, Applicant submits that the rejections are unsupported by the art and should be withdrawn. Applicants request reconsideration and examination of the application in view of the following amendments and discussion.

Applicant further requests reconsideration of the decision to make the second Office Action a final Office Action. Applicant bases the request on the fact that claims 4-26 were objected to and not considered on the merits in the first Office Action with a mail date of September 28, 2004. Another factor is that claims 27 and 28 were rejected under 35 U.S.C. § 112 as being indefinite, and were not considered on the merits.

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